THE LIBRARY AND COMPUTERS

The K.C. Mo. Public Library and it's experience with CLSI

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ACKNOWLEDGEMENTS

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The Kansas City Missouri Public Library was established to fulfill the needs of its patrons. This is done by supplying the patrons two comodities; books and information. The use of computers in the library only deal with the first of these items and that is what will be discussed. Even at that we are not dealing with OCLC(a system to prepare cataloge cards and finding out where books are in other libraries). In the area of information handling, computers (The New York Data Bank) are used to help the patron get what they might need.

The library books can be used either; inside the library building or checked out for use at home(for differing lengths of time.) The Kansas City Missouri Public library is an open stack library (which means that the patron is free to brows through the selves) therefore only books taken outside of the building (checked out) are counted and subsequently put on the computer. To checkout books, the library used basically two methods; stamped bookcards and microfilm. In the stamped book card method, to checkout a book the librarian had to: 1) Stamp the patrons library card, the book date due slip and the book card with a stamp appropriate to the checkout period; 2) Copy the patron library card number fully onto the bookclip and the last two digits on the date due slip; 3) Books and library

card given back; 4) Book cards filed by date due, authors name or dewey decimal number; 5) Counted at end of day according to certain criteria(adult, juvenile, young adult, magazine, paperback.) The reverse of this system was used to check in (return) a book:
1) Stamp patron card across from the date the book is due back and take the book back; 2) Search the book card file for its book card, and put it back in the pocket and put on shelve.

In the microfilm method, a picture is taken of the book and the patrons card and stored, and the old bookclip is filed by number. The reverse here is books pick up their old book clip when they come back.

To prepare overdue slips and bills, one had to look up all the patron's numbers found outstanding and type notices for them. This was a rather time consuming procedure, both for the time it takes to look up each patron number, search for the book and type the notices.

To gain a perspective on why the library went to computers, one should look at the financial position of the library, how the library relates to the patron and how computers come into the picture.

> "In a period of fiscal restriction, libraries today face major challenges in attempting to increase and broaden services. Competing demands for the tax dollar frequently require a library to fight just to maintain its level of funds. At the time, costs for material and personnel are steadily increasing. In order to balance expenses within the budget, libraries must review the allocation of personnel, particularly staff members performing repetitive, clerical and technical activies. Many of the library's technical services, such as book acquisition, and overdues production are repetitive, time consuming, and require large clerical staffs."

A Second area of concern is circulation control and its interrelationships with the patron.

> "Circulation control is costly, time-consuming operation which presents the library with some of its most difficult problems. The library deals with the patron mainly through the circulation operation. Therefore, it is the effeciency of the circulation desk which favorably or unfavorably impresses patrons."

Circulation control is what CLSI does for the library. But one wonders, why hasn't computers being introduced into the library before?

> "In the past, the cost of a comprehensive computer system for libraries has been prohibitively high. Because of the large intial financial investment required, few libraries have achieved any substantial savings through automation. CLSI was formed specifically to solve the problems of computer applications in the library field. Library personnel, working closely with CLSI"s consultants, have studied the needs and requirements of the library. Together, they have developed the LIBS 100, which provides complete information processing systems at a reasonable cost. The LIBS 100 system can be usueful in many library applications, from bood ordering to circulation control. Furthermore, the disired applications can be expanded after the original installation of the system."

The libraries director, Mr. Harold Jenkins, has always been a progress man and when it comes to automation his attitude is business like(which is a position in conflict today in the library field). Mr. Jenkins has strived in his career as a library head and particularly now as head of the Kansas City Missouri Public Library to utilize automation and especially computer oriented systems. He states that he has for along time been looking for a system that does what CLSI does. Finally at a convention, he was discussing his needs, and a person told him of a company that would fulfill his needs. Mr. Jenkins subsequently talked to the people of CLSI and sent out people to look at what CLSI has done previously. The reports were favorable, and because CLSI was the only company that preforms the necessary functions, the library contracted to become one of the first libraries in the Nation to go on computer circulation systems and the first public library in the United States on computers.

Before preceding with the discussion, it is important to note what CLSI is in general. The CLSI equipment and services bring to the library all the benefits of modern data processing techniques and all the advantages of an in-house system, without the problems of establishing and maintaining a specialized processing staff. Actually CLSI offers comprehensive turnkey service for libraries, as proven in existing installations. This includes all aspects of the installation of the LIBS 100 system, from initial planning to system design, staff orientation, operator training and system maintenance. The LIBS 100 is an interactive file processing system designed to meet the needs of the library profession. The hardware used consists of a minicomputer,removable-pack disc drives, a keyboard, and tow printers. CLSI has developed available devices and the amount of storage has expanded to include other printers, displays and specialized statistics for circulation control.

At this time CLSI has currently twenty LIBS 100 systems installed, and a further nineteen systems on order.

Now that tere exists some understanding of how the computer came into the library, the question is what does the computer system do?

"1. It rapidly checks books in and out of the library.

2. It automatically produces overdue notices and invoices.

3. It compiles detailed material and patron statistics.

4. It stores and organizes hold(reserve) information.
    a. It places titles on hold.
    b. It tells the operator whether or not a book is in the library.
    c. It tells the operator when the book is due.
    d. It prints a notice ready for mailing to the next person on the hold list.

5. It detects and traps delinquent patrons at checkout time.

6. It traps titles on hold at checkin time.

7. It provides complete information on a book's current location.

8. It records how many times each book has circulated and how many times each patron has used the library.

9. It produces purchase alerts when there are a specified number of people waiting for a title.

10. The LIBS 100 prepares the following letters, suitable for mailing to patrons:
    a. Overdue notices.
    b. 2nd and 3rd Overdue notices.
    c. Bills.
    d. Recall reminders.
    e. Hold notifications.
    f. Cancellation notices.
    g. Collection notices."

This is what the CLSI computer library system is doing now. It also can do many other things in the future. Mr. Jenkins doesn't expect to use any of these functions in the immediate future, but is considering them for the long-range future.

"The LIBS 100 currently supports the following applications:

1. Ordering of materials.
2. Processing materials.
3. Cataloging.
4. Payroll.
5. Transaction Card Processing.
6. Scheduling of Audio-Visual materials.
7. Inventory."

This is a general idea of what the system does which leads directly into what are the alleged advantages of the system.

"The LIBS 100 Circulation control system alleviates the difficulties inherent in may circulation operations. The LIBS 100 system increases the efficiency of the circulation desk, and produces statistical reports which are generally unattainable under other systems.

The LIBS 100 reduces the expence of a large clerical staff by eliminating the repetitive handling of information. This allows the library to strenghen and extend services to patrons.

The LIBS 100 requires data to be entered into the files only once. Avoiding repetitive data handling not only reduces processing costs, but it also eliminates a significant source of error.

One unusual advantage of this system is that it can be introduced intoa library without prior conversion of the library's holding and of patron cards to the new numbered labels.

Another advantage is that this system can be used in a library either as a single application or in conjunction with other applications of the LIBS 100.

A very important advantage for both the administration and the trustees of the library is the reduction in clerical staff associated with the circulation desk operations. This reduction results in a great financial savings for the library.

Personnel are now not necessary to handle the manual files containing information on overdue books and holds. All such information is stored and organized by the system.

Statistical reports about circulation and patrons which were impossible to compile before can now prove very helpful to the library's staff.

The bar-encoded label is permanently affimed to the book. There are no documents to misplace or lose." The bar-endoded labels are more durable than cards which must be handled each time a book is checked out or checked in." These two are in real question because many Zebra-labels have fallen off and gotten lost, which causes some problems.

"Checkout and checkin functions are performed faster using the light pen." Assumed to be true once system is well known, in the begining it was slower and during rush periods, but now and during regular periods this claim seems to be somewhat true.

Whether or not the system as a whole is desirable or a correct policy desicion can only be seen in approximately one year after all the various costs can be itemized and the alleged advantages either accepted as true and substantal or rejected as nonexistent or insignificant.

To get a better grasp on the outcome of this system, one can look at the machinery, forms used for reports, workings of the system and files. A general discription of the machinery divides everything into three categories:

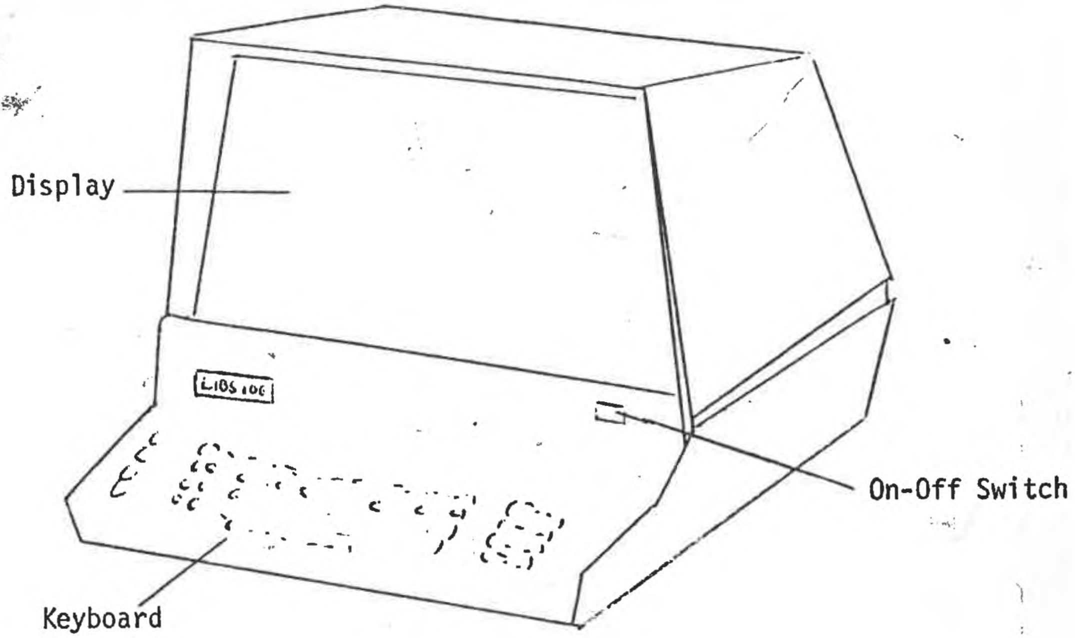
"1. Equipment-The basic LIBS 100 system consists of a unit the size of an office desk. This unit included a keyboard similar to a typewriter, where the operator enters data, and two printers. A full range of equipment is available, including additional disc storage units, light pen terminals, hard copy and display-type remote terminals, and fast printers. These are designed for use with the basic LIBS 100 machine. Equipment is chosen to fit the current needs of each library, and additional equipment may be added as these needs grow.

2. System Software-The LIBS 100 system software provides the applications programmer with an ideal environment for the implementation of library systems.

3. Applications Programs-The applications are written in FLIRT(File Language in Real Time), a unique language designed specifically for the LIBS 100.

The user loads a set of disc packs(which contain all the software) into the disc drives, and the system is ready."

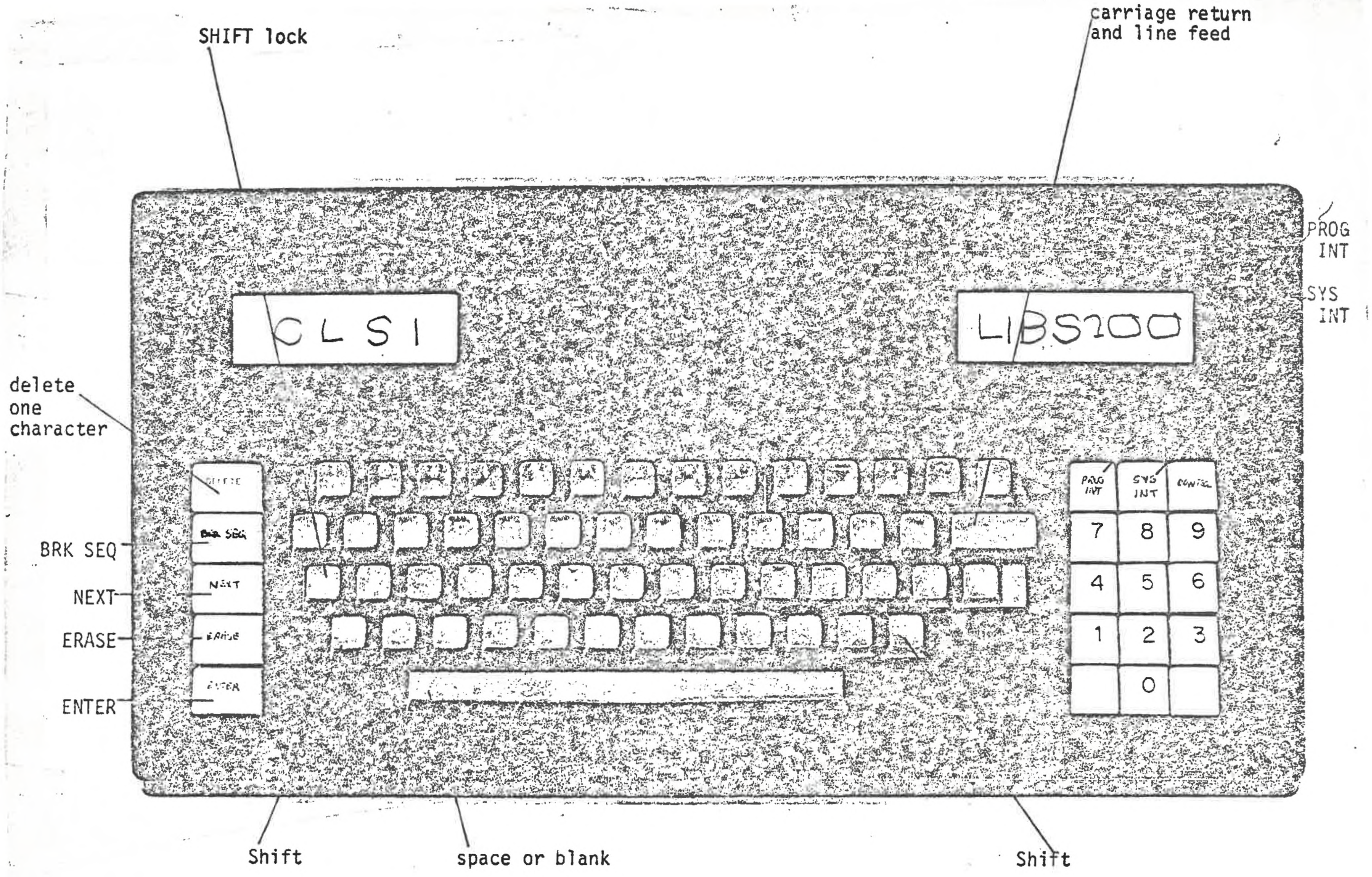
To get more specific, lets look at the terminal, the keyboard, the light pen terminal, the tab card, the light panel and see what they look like.



LIBS 100 KEYBOARD DISPLAY TERMINAL

Most information about both patrons and books are entered through this terminal. The basic workings of this cathod-ray tube is like that of a regular TSO.

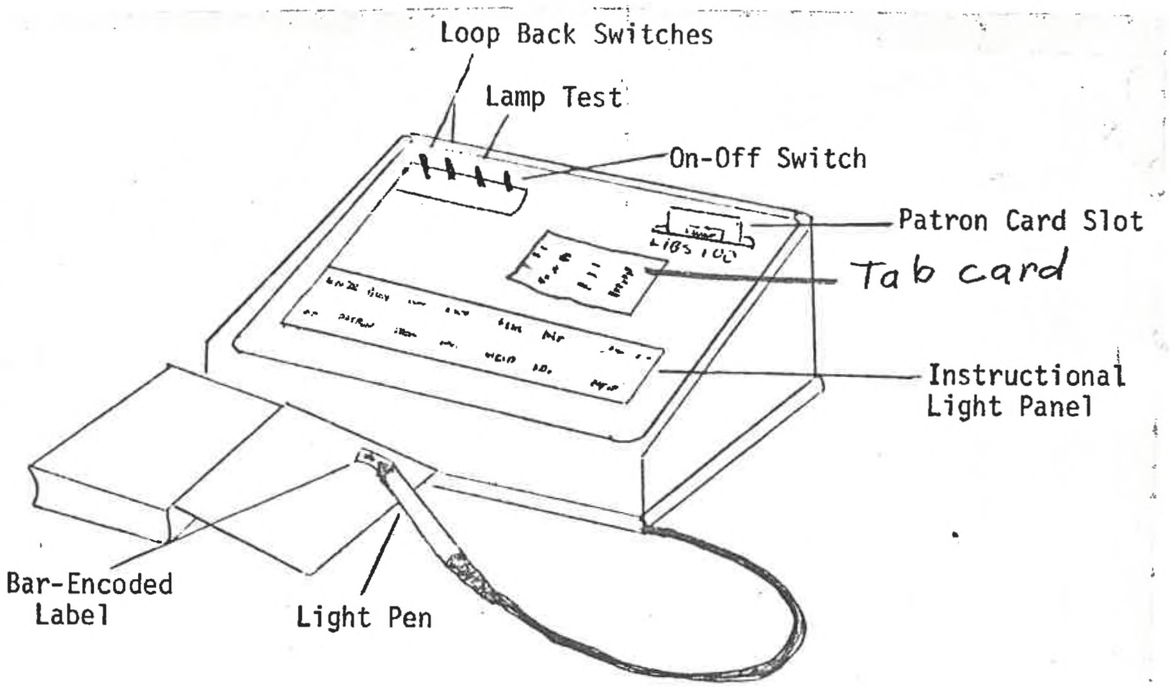
Description on next page (12)



THE LIBS 100 STANDARD KEYBOARD

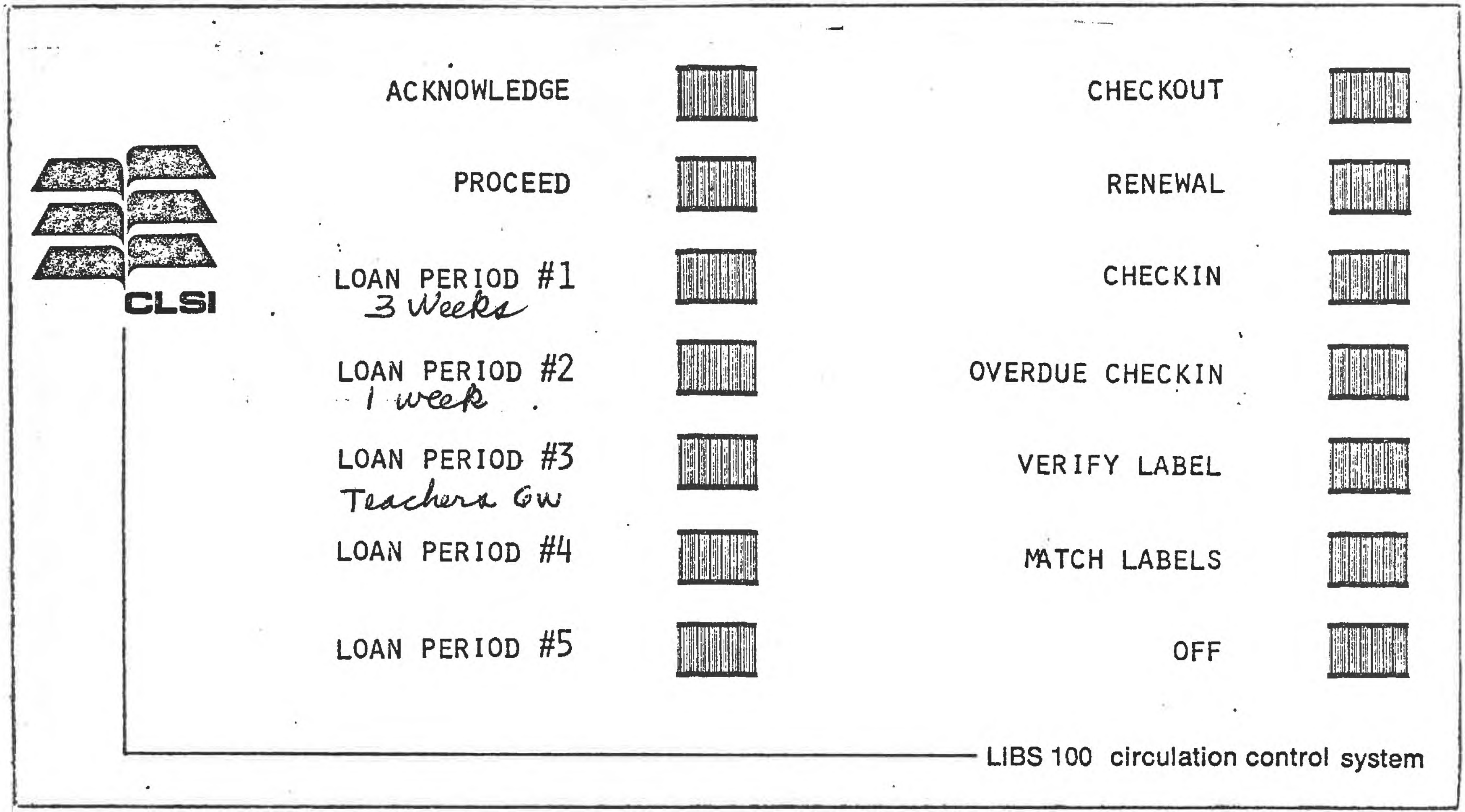
SYSTEM CONSOLE and keyboard/display terminal

The keyboard of the terminal is basically the same as a typewriters. The Delete will earse any mistakes discovered before entering and storing. The Enter is like that of Return on the TSo, which will put that information on temporary storage till either Quit or Store is entered. The Prog Inter is app. the same as Attention on TSO.



LIBS 100 LIGHT PEN TERMINAL

The Light pen is used basically for checking in and out of materials. It must have the appropriate Tab card label read before process can be completed.



CLSI

ACKNOWLEDGE

PROCEED

LOAN PERIOD #1
3 Weeks

LOAN PERIOD #2
1 week

LOAN PERIOD #3
Teachers 6W

LOAN PERIOD #4

LOAN PERIOD #5

CHECKOUT

RENEWAL

CHECKIN

OVERDUE CHECKIN

VERIFY LABEL

MATCH LABELS

OFF

LIBS 100 circulation control system

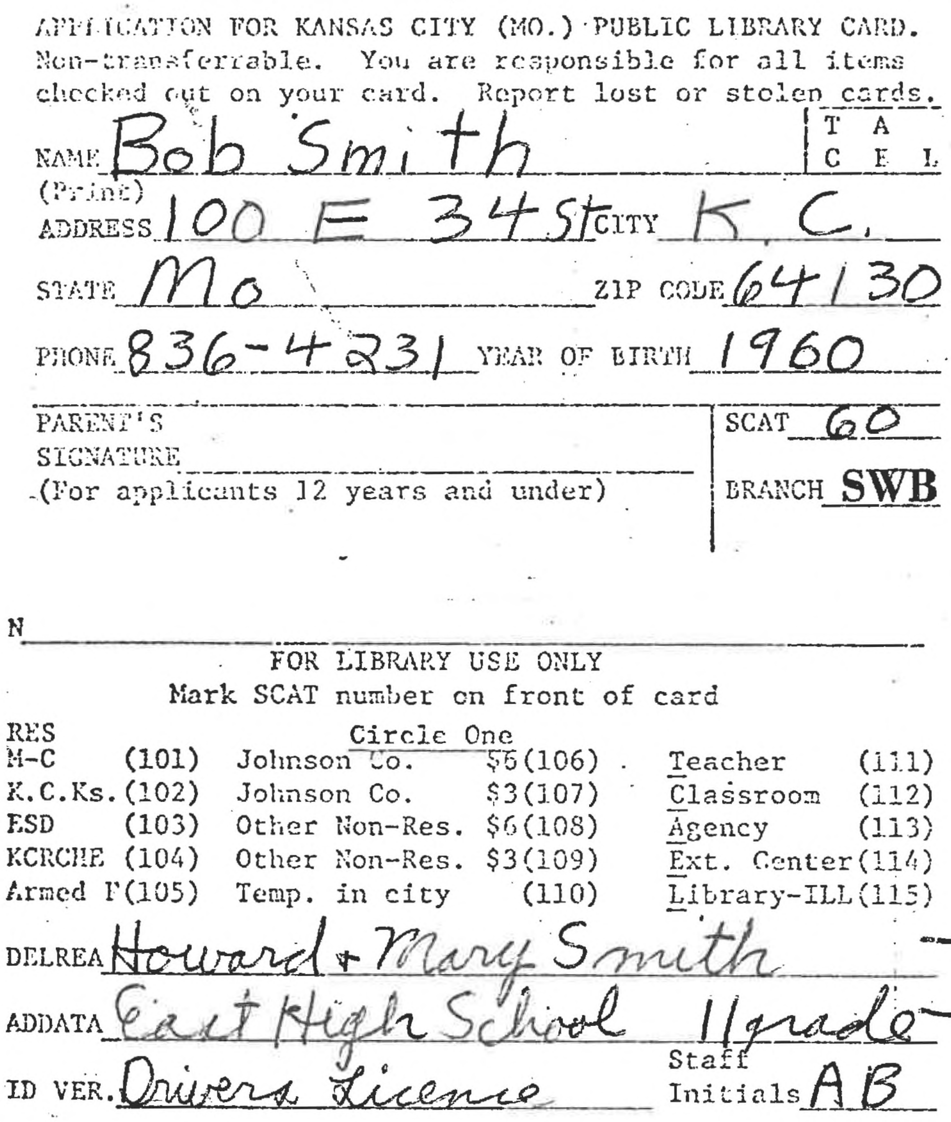
FIGURE 10-1
LIGHT PEN PROCESS TAB CARD

USY	ENTER	PATRON	ITEM	LOAN PERIOD 1	LOAN PERIOD 2	LOAN PERIOD 3	LOAN PERIOD 4	LOAN PERIOD 5	VERIFY LABEL	CHECKIN	CHE
	ERROR	EXCEPTION	ON HOLD	NOT ON FILE	NOT A MATCH				MATCH LABEL	OVERDUE CHECKIN	RENE

LIGHT PEN TERMINAL
INSTRUCTIONAL LIGHT PANEL

Lights are under clear red plastic cover. They light up when that function is being used. This goes for the Error, Exception and One Hold Lights. When these lights up, a little beper bepes up. Which is a audio reminder in addition to the Vidio reminder of what is going on.

The system has four basic forms that deal with the computer and are important to patrons.



APPLICATION FOR KANSAS CITY (MO.) PUBLIC LIBRARY CARD.
Non-transferrable. You are responsible for all items checked out on your card. Report lost or stolen cards.

NAME (Print) Bob Smith	T A C E L

ADDRESS 100 E 34 St CITY K. C.
STATE Mo ZIP CODE 64130
PHONE 836-4231 YEAR OF BIRTH 1960

PARENT'S SIGNATURE (For applicants 12 years and under)	SCAT 60 BRANCH **SWB**

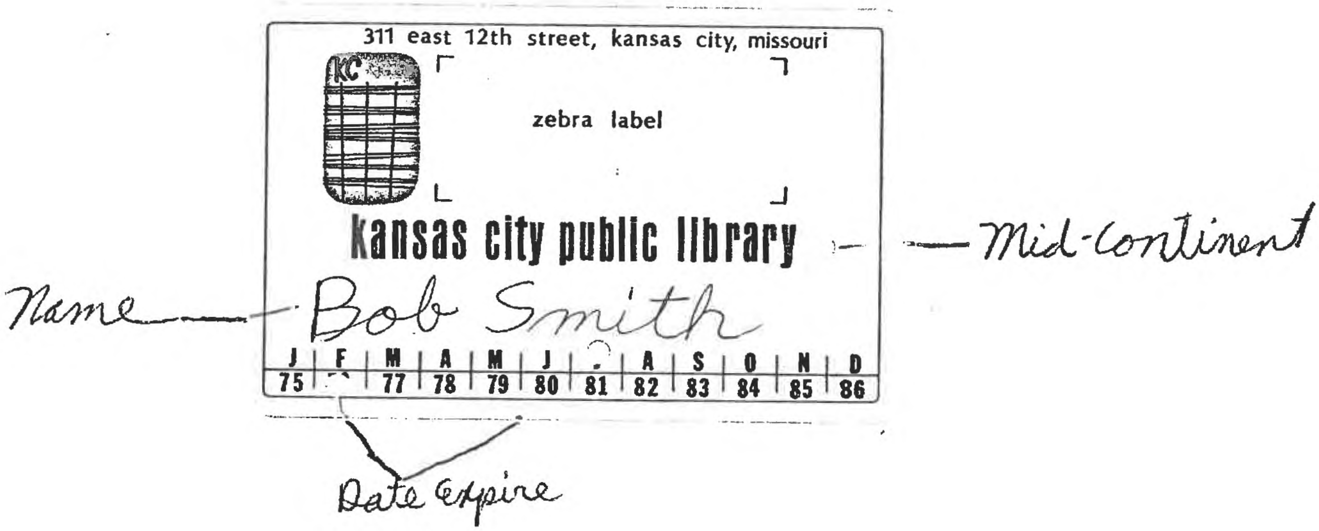
N

FOR LIBRARY USE ONLY
Mark SCAT number on front of card

RES		Circle One			
M-C	(101)	Johnson Co.	$6(106)	Teacher	(111)
K.C.Ks.	(102)	Johnson Co.	$3(107)	Classroom	(112)
ESD	(103)	Other Non-Res.	$6(108)	Agency	(113)
KCRCHE	(104)	Other Non-Res.	$3(109)	Ext. Center	(114)
Armed F	(105)	Temp. in city	(110)	Library-ILL	(115)

DELREA Howard + Mary Smith — **Parents' name if live at home.**
ADDATA East High School 11grade — **School(if go to) or Where work full time**
ID VER. Drivers Licence Staff Initials AB

This is what every patron fills out to get a new computer card. A few months ahead of going "on line" the library gives everyone a new card which invalidates their old one. The information from this card is entered directly in the comp ter by the keyboard terminal.



311 east 12th street, kansas city, missouri

zebra label

kansas city public library

Bob Smith

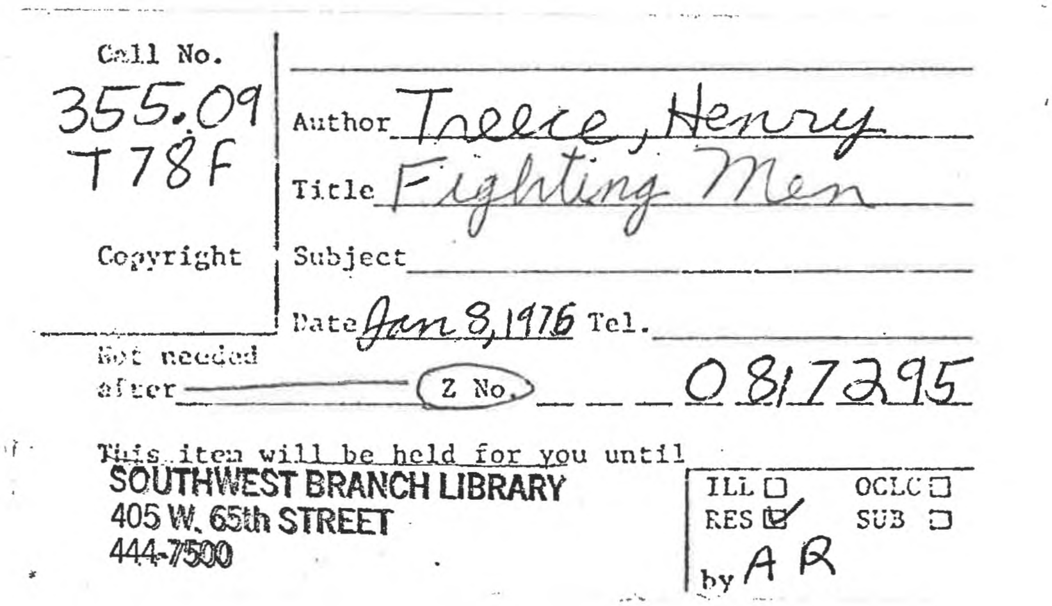
J	F	M	A	M	J		A	S	O	N	D
75		77	78	79	80	81	82	83	84	85	86

Name

Mid-Continent

Date Expire

The zebra label (bar code and number) is applied after the patron fills out the application, and the person signs on the white space beneath Kansas City Public Library. Before this the person is checked in the manual file to see if their might be a penalty against that person. If the patron is from the Mid-Continent Library area, a hole is punched the the right of the word "library". If the card expires, that is punched at the bottom by punching out the appropriate dates.



Call No. 355.09 T78F	Author Treece, Henry
	Title Fighting Men
Copyright	Subject
	Date Jan 8, 1976 Tel.

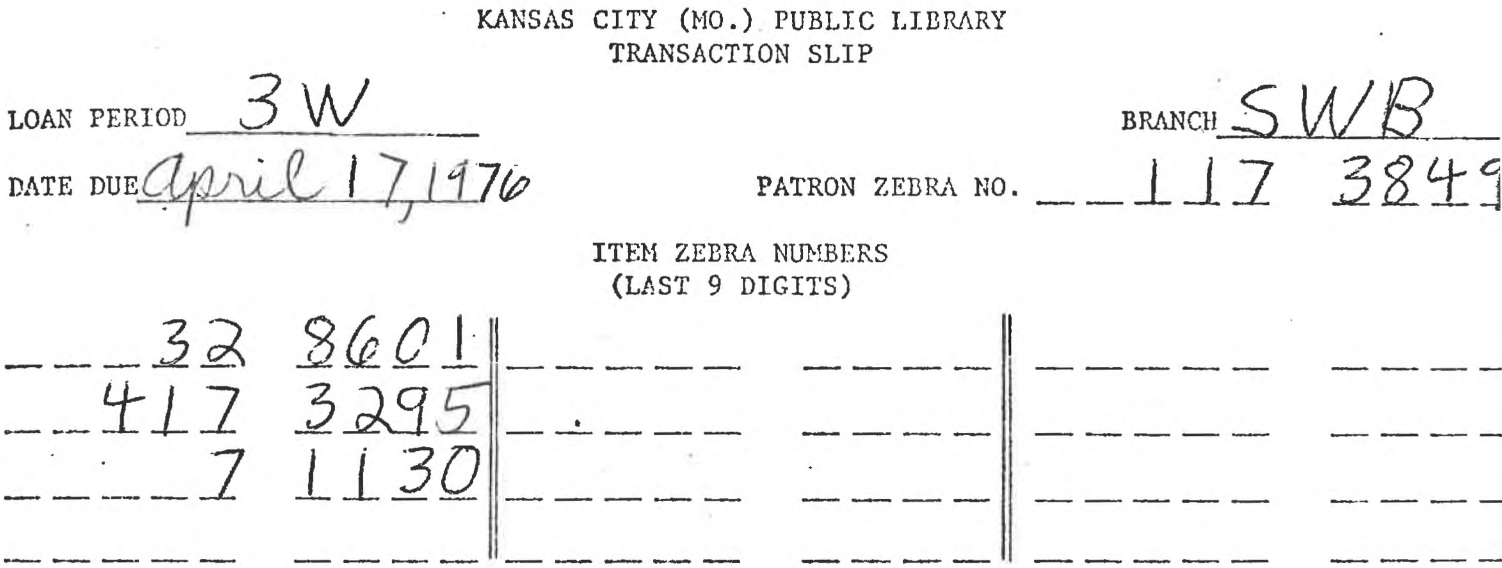
Not needed after Z No. 0817295

This item will be held for you until

SOUTHWEST BRANCH LIBRARY
405 W. 65th STREET
444-7500

ILL ☐ OCLC ☐
RES ☑ SUB ☐
by A R

The reserve process remains basically the same as before the computer came. A patron fils out the card and the library will enter a PLACEAHOLD on the computer. When the book comes in the On Hold light comes on and the book is put on shelf called Hold. The computer automatically generates a notice to the patron annonces that the book is in.



KANSAS CITY (MO.) PUBLIC LIBRARY
TRANSACTION SLIP

LOAN PERIOD 3W
BRANCH SWB
DATE DUE April 17, 1976
PATRON ZEBRA NO. 117 3849

ITEM ZEBRA NUMBERS
(LAST 9 DIGITS)

32 8601
417 3295
7 1130

The transaction slip is used if either the terminals are "down" (non-operational) or the patron has a problem which the light pen terminal will not accept. Transaction slips will later be entered via the keyboard terminal.

Reports are divided into daily log(what goes on in that particular day), daily on hold(what books are held for the patrons), Misc(first overdue notices, bills and discards) and Monthly reports. These sheets are following this page in order.

11/22/75

DAILY LOG
Southwest Branch Library
DAILY STATISTICS

TERMINAL K1A

done

12 CHECKOUTS
4 CHECKINS
0 RENEWALS
3 HOLDS PLACED
0 RECALLS REQUESTED
17 PATRONS REGISTERED
0 PATRONS REREGISTERED

TERMINAL L1B
137 CHECKOUTS
274 CHECKINS
6 RENEWALS
0 HOLDS PLACED
0 RECALLS REQUESTED
0 PATRONS REGISTERED
0 PATRONS REREGISTERED

11/24/75

DAILY LOG
Southwest Branch Library
HOLD SHELF LIST

BOOK	PATRON
BERGURI990 -PA Bernays A -author Growing up rich - Title	ok (as) Evelyn Abrams
MICCENT990 Michener J Centennial	ok as Marjory D Baumgardt
HOBCADU990 Hobson L Consenting adult	ok as Dorothy Clayman
GRAWITM990 Graham W Woman in the mirror	ok as Arlene Davis
KORPOWE990 158.7 K mc Korda M Power	ok as Lindsay H Major
WHISPIN990 Whitney P Spindrift	ok as Mary M Milton
AIKMIAP990 Aiken J Midnight is a place	ok as Carol J Moore
BELHGIF990 Bellow S Humboldt's gift	ok as Mary Ong

11/5/75 DAILY LOG PAGE 20

Southwest Branch Library

OVERDUE/FINE OVERFLOW

Virginia Comstock
451 E 79 St
Kansas City, MO 64131
2 1148 00005 0312

Patron

Books

HASCOTF990
977.8411 H34c — call #
Haskell — author
City of the future — title
3 1148 00002 0594 10/16/75 11/3/75 $0.90

Date due ↓ Date returned ↓

↑ book get number

amount fine due

JENBOWE990
977.8411 J52
Jenkins
The battle of Westport
3 1148 00087 9031 10/16/75 11/3/75 $0.90

EDOMSBO990
q977.8 E24m
Edom
Missouri sketch book
3 1148 00087 9049 10/16/75 11/3/75 $0.90

PARTIAL PAYMENT - $1.95

(Process patron inquiry for current status)

11/24/75

DAILY LOG
Southwest Branch Library
COPIES WITHDRAWN

AMHNBAH990
j359 A51n — call #
American Heritage — author
Naval battles and heroes — title

11/1/75 MATERIAL CIRCULATION STATISTICS PAGE 17

SWB Southwest Branch Library

CIRCULATION	CIRCULATION CLASSES	CATEGORY
3,519	Undefined — books not entered	(0)
1,245	Adult Fiction	(1)
546	Juvenile Fiction & Paperbacks	(2)
255	Juvenile Non-fiction	(3)
792	Juvenile Easies	(4)
89	Y.A. Fiction & Paperbacks	(5)
44	Y.A. Non-fiction	(6)
631	Paperbacks-Adult-Unclassified	(7)
387	McNaughton Books	(8)
3	000-099	(9)
29	130-139	(13)
6	150-159	(15)
42	170-179	(17)
1	180-189	(18)
1	190-199	(19)
4	220-229	(22)
4	240-249	(24)
2	250-259	(25)
2	260-269	(26)
2	280-289	(28)
5	290-299	(29)
15	300-309	(30)
1	310-319	(31)
12	320-329	(32)
6	330-339	(33)
6	340-349	(34)
2	350-359	(35)
11	360-369	(36)
17	370-379	(37)
7	380-389	(38)
12	390-399	(39)
2	400-499	(40)
74	Periodicals	(42)
2	Music Records	(44)
1	Non-music Records	(45)
11	Back-up Collection	(49)
6	500-509	(50)
2	510-519	(51)
2	520-529	(52)
1	530-539	(53)
1	550-559	(55)
1	560-569	(56)
2	570-579	(57)
1	580-589	(58)
10	590-599	(59)
1	600-609	(60)
33	610-619	(61)
14	620-629	(62)
24	630-639	(63)
16	640-649	(64)
3	650-659	(65)
4	680-689	(68)
4	690-699	(69)

dewey decimal number for non fiction

11/1/75 MATERIAL CIRCULATION STATISTICS PAGE 18

SWB Southwest Branch Library

CIRCULATION	CIRCULATION CLASSES	CATEGORY
1	720-729	(72)
3	730-739	(73)
19	740-749	(74)
3	750-759	(75)
1	760-769	(76)
1	770-779	(77)
4	780-789	(78)
40	790-799	(79)
7	800-809	(80)
30	810-819	(81)
10	820-829	(82)
1	840-849	(84)
2	880-889	(88)
1	890-899	(89)
6	900-909	(90)
17	910-919	(91)
29	920-929	(92)
7	930-939	(93)
11	940-949	(94)
6	950-959	(95)
1	960-969	(96)
36	970-979	(97)

671

SWB Southwest Branch Library

year born

how many books checked out

CIRCULATION	CIRCULATION CLASSES	CATE( )R
927	Undefined	(0)
137	1901 and before	(1)
11	1902	(2)
25	1903	(3)
65	1904	(4)
26	1905	(5)
5	1906	(6)
70	1907	(7)
34	1908	(8)
22	1909	(9)
17	1910	(10)
44	1911	(11)
38	1912	(12)
52	1913	(13)
69	1914	(14)
1	1915	(15)
5	1916	(16)
91	1917	(17)
25	1918	(18)
8	1919	(19)
28	1920	(20)
47	1921	(21)
55	1922	(22)
84	1923	(23)
16	1924	(24)
88	1925	(25)
34	1926	(26)
66	1927	(27)
67	1928	(28)
70	1929	(29)
33	1930	(30)
34	1931	(31)
52	1932	(32)
54	1933	(33)
50	1934	(34)
55	1935	(35)
109	1936	(36)
55	1937	(37)
98	1938	(38)
31	1939	(39)
73	1940	(40)
102	1941	(41)
130	1942	(42)
55	1943	(43)
56	1944	(44)
54	1945	(45)
24	1946	(46)
101	1947	(47)
52	1948	(48)
32	1949	(49)
63	1950	(50)
9	1951	(51)
4	1952	(52)

11/1/75 PATRON CIRCULATION STATISTICS PAGE 20

SWB Southwest Branch Library

CIRCULATION	CIRCULATION CLASSES	CATEGORY
7	1953	(53)
5	1954	(54)
13	1955	(55)
25	1956	(56)
100	1957	(57)
217	1958	(58)
304	1959	(59)
344	1960	(60)
370	1961	(61)
214	1962	(62)
194	1963	(63)
376	1964	(64)
230	1965	(65)
147	1966	(66)
150	1967	(67)
295	1968	(68)
183	1969	(69)
152	1970	(70)
34	1971	(71)
437	No Year of Birth Given	(100)
263	Mid-Continent	(101)
216	Employed in School District	(103)
29	Johnson Co. adult	(106)
2	Other Non-resident student/juv	(109)
1	Temporarily in the city	(110)
386	Teacher	(111)
2	Discard	(119)

Now that it seems what the system produces, it is time to see how books are checkin and out so to generate all those statistics. The checkout procedure is divided into four parts:1) books are brought in with the patron card, 2) books are stamped with three week stamp and magazines with the one week stamp, 3) the patron card number and the book number are read and 4) the books and the card are given back to the patron.

The checkin process is only three steps: 1) the book is brought in, 2) the book number is read and 3) the book is put on shelf. There are some exceptions to these procedures. The first is just temporary(till all the books are entered on the computer). If the book doesn't have a zebra label, one is put on the book and it's duplicate on the bookslip. The library keeps the bookslip and enters the information later. Another exception is when the Exception light on the light panel lights up. Then the librarian goes to the keyboard terminal, inquires the system and finds out about the problem.

Southwest Branch has to hold all books and magazines checkin for one day. The explained reason is incase of a wipeout of transactions. This occurance is highly unlikely now because of the more experience of the staff and the double copy of the disks. But if that contention is true, then seem logical that all libraries onthe computer should keep their books out for one day. Consistency within a system seems to be an important concept that is been broken here without substantial reason. All libraries should have to keep the books ar no library should have to keep their books.

When a question arises about a status of a patron, a general title of a book or a specific zebra labeled book, the necessary information can be quickly and effectively be obtained from the keyboard by either the Inquiry or the List processes.

The inquiry process is made up of three components: patron, title and item. To access the patron information file one can use either the PA(the first four letters of their last name, the first letter of their first name and part of their address) or their zebra number. This is because the systems membory consists of three parts:patron, title and item. Access to all files are through the keyboard terminal. Files are easily added to or subtracted from. The Patron file can hold up to app 3 Trillion enteries (3,129,621,247,295). The Title file holds up to app 458 Billion entries (458,647,142,400).

To do a title inquiry, the author's first three letters of his/her last name and the first letter of the first four words of the title are typed in. Like the patron file, the content of the title file is shown, and in addition every copy of that title will be shown(branch held at, zebra number, on shelf or date due back, scat, icator and number of times checkout).

In the item inquiry, the zebra number of the book is typed in, and the following information is given out: T,the patron zebra number if check out, the date due in or the words On Shelf, the icator, the scat and the numbers of times checked out.

The process for getting information is shown below,the underlined information is what the computer types out to us. To access the information, the operator will type Inquiry and then PATR. Then the PA of the person on wants to check. Lets us the patron used in the regisration on page 15.

```
SMITBE34 - PA
Bob Smith
100 E 34 St
Kansas City  Mo _ 64130
Zebra Number here    Category: P  Status: N
836-4231
SWB     0060      11/6/75 (date last used)
```

The second way to get information is through the list process as mentioned before. This process is subdivided into Patronlist and Title-list. Both processes are more complicated and time consuming than the inquiry process but are somewhat more informative. The patron list will list books and numbers whereas the title list will give patron numbers over and above the regular information given in the inquiry process.

The next four pages include two tables that include in information about a book and a person, and their accomping sheet that explains the boundary conditions for the parts. Most of the types are black except for the State (MO) and Status (N).

At this point it is relevent to mention about the use of Status. If the status is N, the computer will accept the patron and check books out to them. The computer can set a parton D if that person has books checked out longer than the acceptable grace period or has more than a dollar in fines. The D can not be overridden by the keyboard terminal. The library can set a person S if they have fines and books out that are not entered on the computer. During the conversion phase, many times the computer has set a patron D and the library needs to set that person S. Otherwise there is no way to catch the person when he/she clears up the D. There needs to be a way to layer D and S. This seem important for complete protection.

Patron File

OCCURANCE	TYPE
2-1148- 00005-0601	PZ
SMITBE34	PA
P	Pactcat
SWB	Branch
60	Scat
Bob Smith	Name
100 E 34 St	St1
	St2
Kansas City	City
Mo	State
64130	Zip
836-4231	Phone
	Icator
N	Status
	Delrea
	Addata

PATRON DATA FIELDS

NOTE: A "*" indicates a required field.

PATRON FIELD ID	MEANING
Pz APATID*	2-1148-00xxx-xxxx 9 character Alphabetic Patron ID in the form LLLLISSSN (table 6-1) where: LLLL= 4 characters of last name I= Initial of first name patron uses SSS= 3 characters of address N= System-supplied uniqueness number.
PATCAT*	Patron category- 1 character. Default=p
AGENCY*	Issuing Agency - 3 characters. Defaults to agency to which terminal is assigned.
SCAT	Statistical Category - up to 4 digits Default = 0
NAME*	Patron´s name - up to 25 characters.
ST1	Street address - up to 25 characters.
ST2	Street address (second line) - up to 25 characters.
CITY	Patron´s City - up to 25 characters.
STATE	Home State - 2 characters (table 6-2). Default = Library´s home state
ZIP	Zip Code - 5 digits.
PHONE	Phone Number - 7 characters (NNN-NNNN) or 10 characters (NNN-NNN-NNNN)
ICATOR	Age Indicator - 1 character. (Usually A,Y, and J).
STATUS*	Patron Status - 1 character N = Not delinquent (default value) D = Delinquent S = Set delinquent by operator L = Lost/Stolen Card R = Re-registered C = Needs System attention
DELREA	Delinquency Reason - Up to 20 char.
ADDATA	Additional Data

Title and Item File

OCCURANCE	TYPE
355.09 T78f	Call
Treece H	Author
Fighting Men	Title
	Edclas
	Publ
1963	Pubyr
	Volind
	Lccard
$4.00	Price
	Matcla
	Ill
	Addata
2-1148-00177-7341	PZ
SWB	Agency
1	Icator
35	Scat
	Q Call

TITLE, VOLUME, ITEM FIELD IDENTIFIERS

TITLE FIELD ID	MEANING
CALL	48 characters of class and cutter information
AUTHOR	Author's name - 25 characters
TITLE	Title - up to 30 characters
EDCLAS	Edition Class - 2 characters - Table 8-4
PUBL	Publisher Code - up to 5 characters
PUBYR	Publisher year - 4 characters - defaults to 0 0 = Pub. yr. unknown
VOLIND	Volume Indicator - V = multi-volume N = not multi-volume Default = N
LCCARD	Library of Congress Card Number - up to 15 characters
PRICE	List price - up to 6 digits Default = $0.00
MATCLA	Material Class - 1 character - Table 8-3
ILL	Interlibrary Loan Indicator - I = ILL title N = Not ILL Default = N
ADDATA	Additional information - up to 15 characters

ITEM FIELD ID	
AGENCY	Owning Agency - 3 characters. Defaults to agency to which terminal is assigned.
ICATOR	Fine class indicator for item - 1 character Defaults to first character in Option parameter for PMAXA.
SCAT	Statistical category - 2 digits Default = 0
Q CALL	Questionable call number field - enter "?" if this item has several call numbers in several different agencies within one library system. Default = blank

The total cost of the computer package was $180,000. The deciding agent in the acquring of the computer was the Board of Education after research and recommendations from Mr. Jenkins. The individual terminals are $7,000 a piece installed. As far as maintenance, its cost is $7,000 a year with a renewable contract. This maintenance included five-day-a-week maintenance service, all parts, labor and expenses, necessary to keep all components, hardware and software in good working order. CLSI offers both preventitive and corrective maintenance for the LIBS 100 system. CLSI provides it own maintenance staff for the total system. The CLSI maintenance philosophy is based on unit exchange rather than on-site repair. This ensures minimum downtime of the system in the event of a failure. The CLSI system has incorporated a set of diagnostic programs that can be run by the libarary staff. The running of these programs is initiated by simple commands from the main console keyboard. This allows early detection of failing equipment in many cases. As another advertising point CLSI says that with the policy of component replacement coupled with powerful diagnostic capability that they have achieved a mean time repair of less than thirty minutes.

CLSI uses preventive maintenance by having checks made on a regular basis by a district office and correction maintenance on the basis of major component exchange. The major components are defined as: the central processor disc, controller, disc drive, I/O printer, console keyboard and instruments, bar-encoded printer, magnetic tape drive and card reader. To us a $7,000 maintanance figure was low for all it does. The only reason we could come up with for the low figure is that CLSI is a young company and in order to get new clients, give out this low maintenance service. But we expect the cost to rise as more libraries take this service.

We felt after our reading in the book, "People Oriented Computer Systems" that it was important to give employees at a company converting over to a new computer system adequate preparation and training. What we have concluded for this class and its readings about employees interaction with the computer from the time of change over, onward will best be handled by a humanistic approach. Thus in our opinion this can best be managed by being completely straight forward with the personnel effected as to the ways and whys of the computer. There should be a training session teaching not only the workings of the computer dealing with each job but explaining away any mysteries or god-like capabilities of the computer. As a selling point, CLSI advertised the fact that training personal is carried on when the system is installed. With the bulk of the training being done automatically by the interaction between the system and the operator. It should be remembered that this is just the manual operation of the operator.

To find out what steps the libary took to train their personnel to work with the library we interviewed Mr. Harold Jenkins. We asked him what training he gave his staff. He said what they did was try to send a core group to CLSI for a week of training, then they in turn taught the managers of each library branch. From this point it was up to the managers to train their employees. Mr. Jenkins seemed very concerned about his employees knowing the computer workings. He said the people have to be prepared and not pushed onto the computer,also that it is a well known fact that people do better if they understand the computer. However what we found to be the case from out interviews was that most of the employees don't understand the computer. This is not to say that some libraries were blundering around in the dark as to what the computer is doing, but that there is evidence of confusion among personnel. Most of the employees knew how to work the computer but when it came down to being comfortable with the computer they were uneasy. This uneasiness stems from not knowing how the computer id doing its' job. The libarians have been in the past, used to visually seeing how books were checked out and in with a card being pulled and filed for each book. Now all that is done by the light pen being run over the zebra label and the book is automatically checked out. To a librarian who has spent some years in this profession, seeing a book go out the door without having a record of its being borrowed in a physical form in front of them is disheartening.

This distrust of the computer in handling the books is also fueled by a practice of the Southwest library. For all checked in books must be stored for a whole day to make sure the computer doesn't go down. And thusly losing all records of who brought what books back. So you see some mistrust of the computer is justly founded. The reason is that Southwest Did lose one whole day of transactions.

As to the question of some interviews if they had been told how the computer would affect their jobs, the answer was always no.

In the overall view, most personnel liked the computer, but there was always in most cases a feeling of uneasiness. We interviewed twenty people ranging from the head of the libraries to individual libarians. The personel on the adult section of the libraries seemed most favorable to the system. When asked what probelms they saw in the computer, most brought up the problem of running out of zebra labels. This they attributed this to poor management foresight. The problem is that they used up more labels than the four suppliers can provide. When tyey had run out of labels they had to resort back to the manual system which didn't set very well with most people. This problem, however, should work itself out as economic factors are in motion. You might ask what causes this uneasiness with the computer? This question puzzles us and what we came up with is this. Before the computer if a librarian made a mistake in her/his job such as checking in a book the only probably damage would be in the library itself. However, now some librarians we think, fear that if they make a mistake it will have much wider ramifications. Instead of just doing damage to the one library, there is the possibility of the mistake echoing throughout the whole library system because all the libraries are tied to this one computimg system. An example of thes types of mistake would be accidentally imposing a fine on a patron, that would not only stop that person from using the one libary but all of them. Further, entering a new book improperly and possible losing it for other libraries. These are not just fears but really happens, with wide effect.

All this is saying is the computer demands the librarian to approach her/his job with more concentration than before and her performance is now a more critical factor.

Some good points that consistently came up were, being able to detect instantly when a patron owes a fine. This is in the eyes of the management of the library, would hopefully, make patrons more responsible for book loans. This would also stop a person who has a fine at one library from checking out books at another library because they are connected to the same information on each individual. If you have a fine at one library, you can't check out a book from another library until you pay your previous fine. Another feature of the computer is that it sends out overdue slips to the patrons automatically. This frees the librarian from boring, repetitive clerical work. The computer also reduces the typing up of cards for each book thus saving costly manhours. Also, the computer can put holds on books that are reserved, this process before was done manually by searching files after the books were checked out to find the ones that had reserves on them. In addition, to theis the computer will automatically send out a notice to the patron when the book has some in.

These various advantages that have come about are exactly what the computer was purchased for, It will free the librarian for more time in helping patrons find needed information and books.

Some other complaints of the system are that you can not distinguish a book that has been checked in to a book that is checked out. Before you could tell by the absence of the bookslip, now that no longer works. This presents a problem when things are real busy and books are stacking up on the counter. The difficulty is when you have a change of librarians (from one shift to another). The librarian,among other things, many times doesn't know what books need to be checked in. The small area of the library counters add to the problem and keep it from having as easy solution. CLSI manual recomend that the librarian check in every book in sight, But that has only worked somewhat, still good patrons get notices for overdue books that we find on shelf(not checked in). There needs to be more bins or trucks for books that have been checked in to be put, and may also need some for books not checked(espically when times are busy).

A lot of time of the librarians is taken up with entering on the keyboard terminal books and patrons information. There seems to be an easier and more efficient way to enter patron information. New computer technology has indtroduced optical scanners, which read information from patron applications. Then all applications at the end of the day would be sent downtown to be read and entered. Thus eliminating some of the burden on On Line branchs. Also the information would be clearer, than now, and more uniform. This is more a suggestion for another library that is planning to get computerized, for the number of applications has slackened as time goes on.

The whole purpose of changing to the computer system was to better serve the patron. One problem which the Library was having was that personal cost was taking up most of the budget, and library materials, books and other things were getting a continuing smaller amount of money. The management of the library hopes to start reversing this trend by using the computer. They have set a goal of getting rid of fifty people by the end of the year through attrition and other means.

Some ways the computer is helping patrons are that the patron gets his/her library card immediately, rather than the two to three week waiting period. A patron can check out a book if they have proper I.D., which is better than before the computer. If the library doesn't have a book the patron can send an inquiry through the computer and find out what other branchs, if any, have that book on shelf. Then he/she can prepare a reserve and get that book immediately.

Patron disadvantages are very few with this system. Some patrons grumble when the computer goes down(but who wouldn't) but that is not very often. Some patrons are upset because they can't tell how many books they have out. Some have said they will now discontinue using the library because it is confusing to the children who lose track of the number of books they have checked out. And the parents do not know either because of the new type of card. The old library cards at Southwest kept track of how many books a person had out. A solution to this problem is to stamp a p slip with the date the books are due back and the number of books, and keep that with the card.

In our research of the CLSI computer in the library, we were interested in discovering the effect it would have on the system as a whole, both positive and negative. Of the thirteen branches in the system, we chose four libraries(Downtown, Southwest, Plaza and Prospect) which we felt would give a representative view of the system. Each of the se libraries had a somewhat different setup from the other three, either before or after the implementating of the CLSI computer.

First of all, we can look at the downtown library, since this is the main library branch it has a much wider capacity. Before the implementing of the computer, all circulation was controlled through the micro film process. With the introduction of the computer system, the main library received the LIBS 100 display stations and two light pen statations. Because of the number of LIBS display stations and the two printers, this library has greater access to the computer.

The Plaza library demenstrates a similar type of system changes. Before conversion of the computer, this library was also using microfilm. This was replaced by both the light pen and LIBS 100 display station.

The Prospect library originally was using the hand stamping mehtod. When the computer was introduced here, a different set-up was used since this branch did not qualify for a LIBS 100 display terminal. It was designated as an Off Line branch, only being given a light pen station to check books in and out. All other information must be sent to one of the On-Line branch to be entered throught their display.

The Southwest branch is representative of many of the now on line branches. Before CLSI, the library was using the hand stamping mehtod. This was replaced by both a light pen station and the display station. These four libraries, basically, show the different methods which CLSI was implemented throughout the thirteen branches.

From this point, we want to show how the situations discovered affect the individual branches, as well as the total system.

When the software program was bought the contract included thirteen light pen stations and seven LIBS 100 display stations. The reasons for this limited numbers was both the cost and capacity of the system. With these limitations in mind, some decisions had to be made concerning which branchs should receive what. The main decision to make was with the display stations as to which branches had the most need in relation to circulation. These branches, with the highest circulation, would be the On line branches. All branches would be given a light pen station to check the books in and out. So as a consequence, the library has a system with both On line and Off line branches.

This setup has created some disadvantages for the individual libraries. First, we will look at the individual branches to see what has happened. In looking at each library, we will exclude the factor of conversion and concentrate on the effect of the system.

Downtown library has the greatest number books on shelf. In the adult section which utlized the microfilm process, checkin in and out procedures werespeeded up, but control of books wea misery as well as inefficient. This new system creates a quicker amd more efficient method of checking books in and out. The control aspect, knowing where books are, has improved. Besides the ability of the CLSI system,the speed and efficiency in the adult section of the library is due to the installation of the light pen station and one display station. This is the only library that has such a set up. When looking at the children's section downtown, we came across a different situation, which is also unique to the downtown library. This section, was set up with only a display station,which creates the problem of checking books in and out. In this section the CLSI computer has not alleviated the process of hand stamping the books. The only advantage here, would be the use of the terminal in locating books and the registration of new patrons.

The PLaza library used micro film before and it said that the computer has restored to control of books which was not evident with the microfilm process.

The Prospect library was previously set up with the hand stamping method. Although the efficiency was not as great as the present system, this branch still had some control on their books. But now this library being set up as an off line branch, it loses this control. There is no access to a display station except by phone which is too time consuming to rely upon for regular information. An Off line branch is therefor is unable to get reference information on both patrons and books. All information needed to be recorded in the computer must be sent to an on line branch, which creates a time lag in the system as well as increased work for the on line branches.

As mentioned earlier, the Southwest branch went from hand stamping to CLSI with both a LIBS 100 display terminal and a light pen station. This conversion showed an increase in control and efficiency over the old method. In our interviews, we found that the results of this type of change was regarded as the most favorable. Having both the light pen and the display station enables the library to operate ef effectively.

In taking an overall view of each individual library, the effects vary. The range of effects has been from very little improvement to that of overall success.

When we begin to look at the overall changes in the library stystem we can see that the major improvement has been that of uniformity of all the branches. Every system is using the same procedure rather than the piecemeal approach used previously.

A few factors that should be mentioned are that the bugs in both the software and hardware. One must realize that in any system a few minor problems will have to be expected, during the introductory phase of the system. One of the most frustrating probelms for the libraians is ehen the computer "goes down". This creates a back log and a time lost of work. As for the software problems, the library has no real control. The library has suggested some things,like layering D and S and filing in Kansas City in City on the patron file. One problem is this area would be the lack of storage space for different subjects. Another problem mentioned was the distinction between adult and juvenile fines. The computer at times will incorrectly accumulate the wrong amount to the designated category of Jevenile or adult books. Aslo there is a proble of the computer counting Sundatys and Holidays when calculating fines, which were previously omitted.

But all of these are minor problems when looking at the overall advantages of the system. All things taken into account, the introduction of the computer has been a very useful improvement in the functioning of the library system.

REFERENCES

LIBS 100-Circulation Control System: Terminal Operators Guide, CLSI.

Various Librarians at the Downtown, Plaza, Prospect and Southwest Branchs of the K.C. MO Public

Various Sheets that have been prepared for distribution to the Branches form either CLSI or Downtown.